DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-029260
Date Inspected: 14-Mar-2013

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name:	As noted below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QA Inspector randomly observed the ABF welder Mike Jimenez #4671 conduct the fit-up operations of the Deck Access Hole (DAH) located at 12E PP116.5-E2. The Quality Control inspector measured excessive root opening with a minimum of 21mm and a maximum of 24mm. This QA Inspector verified non continuous backing was installed on the root side of the weld. This QA Inspector generated a TL-15 on this date in reference to the aforementioned two items. This QA Inspector received report #191 also on this date and welding commenced. This QA Inspector randomly observed the welder perform the SMAW process in the 1G flat position utilizing the WPS ABF-D1.5-1040C-CU and was also observed preheating the welds prior to welding. Other welding parameters as inspected by the QC Inspector were recorded as 135 amperes and appeared to be in compliance with the WPS noted above. The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in progress and appeared to be in general conformance with the contract documents.

This QA Inspector randomly observed the ABF welder Wai Kit Lai #2953 utilize the Carbon Arc Gouging (CAG) method on the East Skyway lifting lug Hole #1 on the interior of the Skyway. This QA Inspector observed the welder remove weld metal from the root side of the weld and observed QC inspector perform a Magnetic Particle (MT) inspection of the site to ensure soundness of the metal. It was observed that no indications were noted and this QA Inspector observed the welder perform the SMAW process in the 4G overhead position in accordance with ABF-WPS-D1.5-1030-Revision 1. The QC inspector was observed monitoring the welding and the

parameters as they applied to the above mentioned WPS and noted that the work at this location was in progress and appeared to be in general conformance with the contract documents.

This QA Inspector randomly observed ABF welders Chris Bruce #8901 perform the SMAW process on the Deck Access Hole (DAH) located at 12W PP116.5-W2. The welder was observed utilizing WPS ABF-D1.5-1040C-CU for SMAW and was also observed preheating the welds prior to welding. Other welding parameters as inspected by the QC Inspector were recorded as 136 amperes and appeared to be in compliance with the WPS noted above. The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in progress and appeared to be in general conformance with the contract documents.

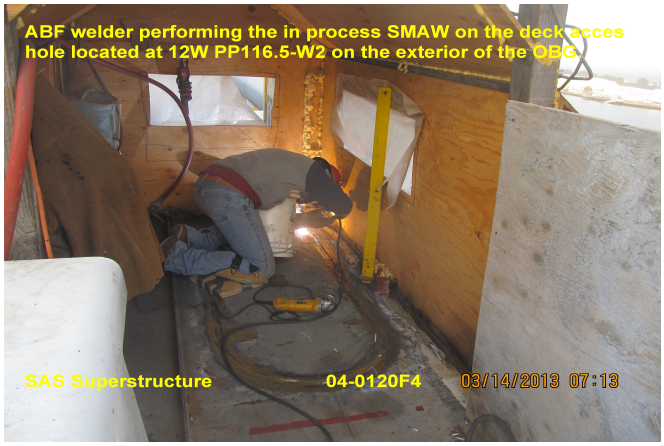
This QA Inspector performed 100% Magnetic Particle (MT) testing on the longitudinal stiffeners located at 12W PP116.5-W2. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed an Ultrasonic (UT) inspection on the longitudinal stiffeners located at 12W PP116.5-W2. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, Section 6, Table 6.3. The testing was performed in accordance with AWS.D1.5-2002 Section 6.13. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6027 UT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA observed QC Inspector William Sherwood and Salvador Merino performing welding parameter checks such as voltage, amps, electrodes and preheats throughout the day. Non-Destructive Testing methods utilized by the QC Inspectors were Visual Testing (VT), Magnetic Particle Testing (MPT) and Ultrasonic Testing Shear Wave (UTSW). QC Inspectors were observed performing inspection per applicable code and or contract criteria. Unless otherwise noted, all work observed on this date appeared to generally comply with the contract documents.

Summary of Conversations:

Conversations were relevant to work performed.



WELDING INSPECTION REPORT

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer